



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,318	05/31/2000	Alok Srivastava	A-011	2234

21253 7590 12/07/2004

CHARLES G. CALL
68 HORSE POND ROAD
WEST YARMOUTH, MA 02673-2516

EXAMINER

NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
----------	--------------

2176

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/584,318

Applicant(s)

SRIVASTAVA ET AL.

Examiner

Chau Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment, received on 06/23/2004, has been entered. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Meltzer et al. (Meltzer), US Patent No. 6,542,912.
4. As to claim 8, Meltzer discloses apparatus for processing a request for information from a specified resource which comprises, in combination,

Art Unit: 2176

a database for storing a service description for each of a plurality of different resources, said service description comprising an input processing specification, an resource address, and an output processing specification (col. 4, lines 17-31: a repository (database) stores a library of logic structures, content models, and schematic maps for logic structures, and definition of documents (service description) that comprise logic structures used to build interface description),

an executing application program for issuing said request for information from said specified resource (col. 3, lines 4-58: establishing an interface for transactions comprising a machine-readable specification of an interface which includes a definition of an input document and a definition of an output document, that are accepted and produced by transaction processes for which the node acts as an interface, and the definitions of the input and output documents comprise respective descriptions of sets of storage units such as a standard XML based document), and

an interface program for receiving said request from said executing application program via a standard application program interface, said interface program including (col. 3, lines 4-58 and col. 24, line 56 – col. 25, line 5),

means for retrieving the particular service description for said specified resource from said database (col. 24, line 56 – col. 25, line 5),

means for processing said request in accordance with the input processing specification contained in said particular service description for said

Art Unit: 2176

specified resource to produce a reformatted request (col. 24, line 56 – col. 25, line 5),

means for transmitting said reformatted request to the resource address contained in said particular service description for said specified resource (col. 24, line 56 – col. 25, line 5);

means for receiving a raw response from said specified resource in response to said reformatted request (col. 24, line 56 – col. 25, line 5),

means for processing said raw response in accordance with said output processing specification contained in said particular service description for said specified resource to produce a reformatted response (col. 24, line 56 – col. 25, line 5), and

means for transmitting said reformatted response to said executing application program (col. 3, lines 4-58 and col. 24, line 56 – col. 25, line 5).

5. As to claim 9, Meltzer discloses registration means for accepting descriptive data from a remote location and for processing said descriptive data to form said service description stored in said database (col. 19, lines 49-64).

6. As to claim 10, Meltzer discloses wherein in said input processing specification includes the designation of an input adaptor program which, when executed, performs at least some of the processing of said request to produce said reformatted request (col. 24, line 56 – col. 25, line 5).

Art Unit: 2176

As to claim 11, wherein said output processing specification includes the designation of an output adaptor program which, when executed performs at least some of the processing of said raw response to produce said reformatted response (col. 24, line 56 – col. 25, line 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meltzer et al. (Meltzer), US Patent No. 6,542,912 and further in view of Perkowski, US Patent No. 6,064,979.

9. As to claims 1 and 12, Meltzer discloses a method of obtaining information via the Internet from each of a plurality of diverse data resources having different characteristics which comprises, in combination, the steps of:

storing a separate service description for each given data resource in a database, said service description including (col. 4, lines 17-31: a repository

Art Unit: 2176

(database) stores a library of logic structures, content models, and schematic maps for logic structures, and definition of documents (service description) that comprise logic structures used to build interface description):

an address to which an output information request directed to said given data resource may be transmitted (col. 4, lines 32-54, col. 10, lines 3-42, col. 11, lines 41-58: a market participant document (service description) associating contact and address information with a description of services and financial information, and these services identified by the market participant will specify the input and output documents which that participant is expected respond to and produce),

a specification of the nature of the input information to be supplied to said given data resource with said output information request (col. 3, lines 1-23, and col. 27, lines 15-40), and

a description of the nature of the output information to be supplied by said data resource in response to said output information request (col. 3, lines 1-23, and col. 27, lines 15-40),

establishing an application program interface for accepting service requests in standard form from executing application programs (col. 3, lines 4-58: establishing an interface for transactions comprising a machine-readable specification of an interface which includes a definition of an input document and a definition of an output document, that are accepted and produced by transaction processes for which the node acts as an interface, and the definitions

Art Unit: 2176

of the input and output documents comprise respective descriptions of sets of storage units such as a standard XML based document),

issuing a service request identifying a particular resource from an executing application program to said application program interface (col. 19, lines 16-40: user input identifying a participant, service and document information generated by graphical interface), and

executing a service interface program in response to said service request, said service interface program performing the steps of:

obtaining the particular service description for said particular resource from said database (col. 19, lines 16-40: any referenced logical structures, interpretation information, document definitions and/or service definitions are retrieved from the repository in response to user input via the graphical interface),

transmitting an output information request to said address specified in said particular service description (col. 24, line 56 – col. 25, line 5): an input document (an output information request) is received at the network interface from an originating participant node),

obtaining said input information conforming to said specification contained in said particular service description from said executing application program and supplying said input information to said particular resource (col. 3, lines 4-58: establishing an interface for transactions comprising a machine-readable specification of an interface which includes a definition of an input document and a definition of an output

Art Unit: 2176

document, that are accepted and produced by transaction processes for which the node acts as an interface, and the definitions of the input and output documents comprise respective descriptions of sets of storage units such as a standard XML based document; col. 24, line 56 – col. 25, line 5), and

routing output information provided by said particular resource in response to said output information request to said executing application program (col. 24, line 56 – col. 25, line 5).

Meltzer discloses in col. 4, lines 32-54, col. 10, lines 3-42, col. 11, lines 41-58: a market participant document (service description) associating contact and network address information with a description of services and financial information, and these services identified by the market participant will specify the input and output documents which that participant is expected respond to and produce. However, Meltzer does not explicitly disclose network address is an Internet address. Perkowski discloses IPSI (Internet Product and Service Information) Registrant Database maintained at each IPSP Server storing data information for each registrant including name, product description, uniform resource locator (URL), email address... (Fig. 2A1 and col. 6, lines 26-47) Thus, URL and email address would be considered as internet addresses, therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify network address of Meltzer's system to internet address of Perkowski's so the product description can be linked to the URLs providing service-related information customized to services.

10. As to claims 2 and 13, Meltzer and Perkowski (Meltzer-Perkowski) disclose wherein said step of storing a separate service description for each given data resource comprises registration means for accepting service description information in a predetermined format (col. 9, line 44 – col. 10, line 42: participants are able to send documents (service description) to a market marker node, at which the document is identified and routed to an appropriate participant which has registered to receive such documents as input in an XML format).

11. As to claims 3 and 14, Meltzer-Perkowski disclose wherein said predetermined format is the Extensible Markup Language (Meltzer, col. 10, lines 3-42).

12. As to claims 4 and 15, Meltzer-Perkowski disclose wherein said service description as expressed in Extensible Markup Language is validated against a Service Descriptor schema which specifies the content of said service description before said service description is stored in said database (Meltzer, col. 11, line 13 – col. 12, line 13).

13. As to claims 5 and 16, Meltzer-Perkowski disclose wherein said service description as stored in said database further comprises contact information

Art Unit: 2176

specifying a person or entity supplying the resource described in said service description (Meltzer, col. 10, lines 3-42).

14. Claims 6-7 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meltzer as discussed above, and further in view of Walker et al. (Walker), US Patent No. 6,041,308.

15. As to claims 6 and 17, Meltzer discloses limitations as discussed above. However, Meltzer does not disclose wherein said service description as stored in said database further comprises test information consisting of a fixed input value and a fixed output value which enables said service interface program to perform automatic testing of the described resource by sending said fixed input value to said resource and comparing the resulting output from said resource with said fixed output value. Walker discloses a test is performed to determine if a conditional purchase offer is accepted or rejected, and if it is accepted (fixed input value), then the conditional purchase offer selects one accepting seller and notifies the corresponding seller (fixed output value) (col. 9, lines 17-64). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Meltzer and Walker to include wherein said service description as stored in said database further comprises test information consisting of a fixed input value and a fixed output value which enables said service interface program to perform automatic testing of the described resource by sending said fixed input value to said resource and

Art Unit: 2176

comparing the resulting output from said resource with said fixed output value in order to make the system more efficient.

16. As to claims 7 and 18, Meltzer and Walker disclose wherein said service description as stored in said database further comprises security information for ensuring that a request for output information originates from an authorized source before that request is satisfied (Walker, col. 9, lines 40-52).

Response to Arguments

In the remarks, Applicant(s) argued in substance that

A) "The Office Action Summary indicated that the Action was "Responsive to the communication tiled on 31 May 2000" (the application as filed) but does not acknowledge receipt and entry of the Preliminary Amendment which applicants filed for this application on April 10, 2003. In the event that Preliminary Amendment was not received and entered, the Examiner is requested to call applicants' undersigned attorney at (508) 778-2630." (see page 7 of remarks)

As to point A), although the Examiner forgot to include the date of the Preliminary Amendment in the Office Action Summary, the Office Action mailed to the applicants on 02/23/2004 was based on the claimed version from the Preliminary Amendment received on April 15, 2002.

Art Unit: 2176

B) "Meltzer's system is not used to dynamically respond to a request from an executing application program by consulting a service description database to determine the nature of the input information needed, translate that information into the format specified by the service description, transmit the input information to an Internet address specified in the service description, and then return the output information returned by the service provider to the requesting executing application program." (see page 8 of remarks)

As to point B), Meltzer disclose establishing an application program interface for accepting service requests in standard form from executing application programs (col. 3, lines 4-58: establishing an interface for transactions comprising a machine-readable specification of an interface which includes a definition of an input document and a definition of an output document, that are accepted and produced by transaction processes for which the node acts as an interface, and the definitions of the input and output documents comprise respective descriptions of sets of storage units such as a standard XML based document),

issuing a service request identifying a particular resource from an executing application program to said application program interface (col. 19, lines 16-40: user input identifying a participant, service and document information generated by graphical interface), and

executing a service interface program in response to said service request, said service interface program performing the steps of:

Art Unit: 2176

obtaining the particular service description for said particular resource from said database (col. 19, lines 16-40: any referenced logical structures, interpretation information, document definitions and/or service definitions are retrieved from the repository in response to user input via the graphical interface),

transmitting an output information request to said address specified in said particular service description (col. 24, line 56 – col. 25, line 5): an input document (an output information request) is received at the network interface from an originating participant node),

obtaining said input information conforming to said specification contained in said particular service description from said executing application program and supplying said input information to said particular resource (col. 3, lines 4-58: establishing an interface for transactions comprising a machine-readable specification of an interface which includes a definition of an input document and a definition of an output document, that are accepted and produced by transaction processes for which the node acts as an interface, and the definitions of the input and output documents comprise respective descriptions of sets of storage units such as a standard XML based document; col. 24, line 56 – col. 25, line 5), and

routing output information provided by said particular resource in response to said output information request to said executing application program (col. 24, line 56 – col. 25, line 5).

Art Unit: 2176

Meltzer discloses in col. 4, lines 32-54, col. 10, lines 3-42, col. 11, lines 41-58: a market participant document (service description) associating contact and network address information with a description of services and financial information, and these services identified by the market participant will specify the input and output documents which that participant is expected respond to and produce. However, Meltzer does not explicitly disclose network address is an Internet address. Perkowski discloses IPSI (Internet Product and Service Information) Registrant Database maintained at each IPSP Server storing data information for each registrant including name, product description, uniform resource locator (URL), email address... (Fig. 2A1 and col. 6, lines 26-47) Thus, URL and email address would be considered as internet addresses, therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify network address of Meltzer's system to internet address of Perkowski's so the product description can be linked to the URLs providing service-related information customized to services.

C) "Meltzer does not provide an application program interface whose services may be invoked by an executing application program in order to trigger a service description" (see page 8 of remarks)

As to point C), Meltzer discloses in col. 3, lines 4-58: establishing an interface for transactions comprising a machine-readable specification of an interface which includes a definition of an input document and a definition of an output document, that are accepted and produced by transaction processes for

Art Unit: 2176

which the node acts as an interface, and the definitions of the input and output documents comprise respective descriptions of sets of storage units such as a standard XML based document.

17. Applicant's arguments and amendments filed on 06/23/2004 with respect to claims 1 and 12 have been considered but are moot in view of the new ground(s) of rejection. Please see the rejection and response to argument above.

Art Unit: 2176

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The examiner can normally be reached at 8:00 am – 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3230.

Art Unit: 2176

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20131

Or Faxed to:

(703) 872-9306, (for **formal communications**; please mark
"EXPEDITE PROCEDURE").

Or:

(703) 746-7240 (for **informal or draft communications**, please
label
"PROPOSED" or "DRAFT").

Or:

(703) 872-9306 (for **After Final Communications**).

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Chau Nguyen
Patent Examiner
Art Unit 2176


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER